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Changing Public and Private Roles in the Dutch Child-Care Sector: Effects on Employee Governance and Employee Motivation

Mirjam Plantinga¹, Janneke Plantenga², Jacques Siegers³, Hans Knol⁴

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Abstract

The Dutch child-care sector is confronted with a transition from a welfare sector to a market sector. Policy makers assume that the introduction of market forces in the child-care sector increases efficiency and improves the balance between supply and demand. In discussions regarding the introduction of market forces in welfare-oriented sectors, like the child-care sector, the possible effects for employees are usually not taken into consideration. The introduction of market forces in the child-care sector might, however, influence the employee governance of child-care organisations, which might in turn have an effect on employee motivation. This paper describes and explains the effects of the introduction of market forces in the Dutch child-care sector on employee governance and employee motivation. The sample consists of 477 child-minders from 30 Dutch child-care organisations. The results show that child-care organisations differ in employee governance. Child-care organisations confronted with a high level of market forces are characterised by a tighter job design and offer a more attractive reward and career system than child-care organisations confronted with a low level of market forces. The differences in employee governance in turn positively affect extrinsic motivation. Intrinsic motivation is not affected.

¹ Interuniversity Center for Social Science Theory and Methodology (ICS), University of Groningen, Grote Rozenstraat 31, 9712 TG Groningen, The Netherlands, e-mail: m.plantinga@rug.nl.

² Interuniversity Center for Social Science Theory and Methodology (ICS) and Utrecht School of Economics, University of Utrecht.

³ Interuniversity Center for Social Science Theory and Methodology (ICS) and Utrecht School of Economics, University of Utrecht.

⁴ Faculty of Behavioural and Social Sciences, University of Groningen.

1 Introduction

The Dutch child-care sector is confronted with a transition from a welfare sector to a market sector. The transition process is in line with a trend in the care sector of most developed countries towards a more business-like approach and an accompanying attention to raise efficiency (Denton *et al.* 2002; Propper, Burgess and Green 2004). Even in traditionally welfare-oriented sectors, such as the care sector, market forces are introduced.

Policy makers assume that the introduction of market forces in the Dutch care sector improves the balance between supply and demand and increases efficiency. Due to the introduction of market forces in the Dutch child-care sector, parents are expected to receive more possibilities of choice and the sector is expected to become more attractive for new suppliers (Ministerie van VWS 2000). In discussions regarding the introduction of market forces in care work the possible effects for employees are, however, usually not taken into consideration. The question is whether the possible effects on employees are rightly dismissed. What if the introduction of market forces in care work affects employee motivation? Given that care work is highly labour intensive, the performance of the care sector depends highly on the willingness and quality with which the employees working in this sector apply themselves to their tasks (Franco, Bennett and Kanfer 2002). In order to be able to predict the impact of the introduction of market forces in care work, it is therefore of utmost importance to have an understanding of the possible effects the introduction of market forces may have on employee motivation.

In this paper we will describe and explain the effects of the introduction of market forces in the Dutch child-care sector on employee governance and employee motivation. The introduction of market forces in the child-care sector is expected to influence the employee governance of child-care organisations, which in turn is expected to affect employee motivation.

The child-care sector is believed to be a good example to investigate the consequences of the transition from a welfare to a market sector on the work motivation of care-work employees. First of all, the child-care sector forms a representative example of the care sector as a whole with regard to sector specific characteristics like being highly labour intensive, having a high percentage of female employees and a large amount of part-time employees (Nivel, Prismant and OSA 2003). Second, child-care employees are representative for other care-work

employees with regard to the motivation they derive from different aspects of their work. Both child-care and other care-work employees mention autonomy and work that is meaningful as the most important aspects of their work, while they are least motivated by the financial compensation and career perspectives (Lindsay and Lindsay 1987; Philips, Howes and Whitebook 1991). Finally, due to the introduction of a new law in the Dutch child-care sector, the whole child-care sector is forced to change in a very short period of time from a supply-financed welfare sector into a demand-driven market sector. The Dutch child-care sector therefore forms a unique case to analyse the consequences of the introduction of market forces in care work on the work motivation of care-work employees.

The paper is organised as follows. Section 2 describes the introduction of market forces in the Dutch child-care sector. Section 3 presents the expected effects of the introduction of market forces in the Dutch child-care sector on employee governance and employee motivation. In Section 4 the method section of the paper and in section 5 the results are given. The final section concludes.

2 The introduction of market forces in the Dutch child-care sector

The supply of formal child care has grown enormously the past years in the Netherlands, from 20,000 child places in 1989 to over 100,000 child places ten years later (Ministerie van VWS 2000). Especially day care for children under four years of age is popular in the Netherlands, since it offers parents the opportunity to combine work and care. In 2003 over 100,000 child places were offered in Dutch day-care centres. Moreover, since most children in the Netherlands stay in day care only two or three days a week, the number of children that makes use of day care is much higher than the amount of child places available in day-care centres. In 2003 over 180,000 children made use of day care, which was 22% of the total number of Dutch children under four years of age (Statistics Netherlands 2005).

Over the years, the Dutch child-care sector has therefore evolved from a small sector with 8,000 employees in 1990 into a grown up sector employing over 60,000 employees in 2003 (Statistics Netherlands 2001; 2005). The largest part of the work is conducted by the child-minders, who look after the children. Most of the child-minders have a part-time contract, are female and are rather young. Almost half of the child-minders are below the age of thirty. The child-care sector therefore is one of the sectors with the highest percentage of women and the lowest average age of the employees (Hingstman *et al.* 2003).

The growth in the Dutch child-care sector has gone hand in hand with a transition from a welfare sector to a market sector. Market forces were slowly introduced in the Dutch child-care sector with the introduction of the Stimulative Measures on child care in 1990 (Turksema 2000). In the first place, the Stimulative Measures were aimed at increasing the supply of child care. In order to be able to afford the increase in growth in the child-care sector, the Dutch government tried to spread the costs of child care over three parties: the government, the parents and the employers. The government stimulated child-care organisations to sell child places to employers by granting subsidies to child-care organisations if and only if the child-care organisation supplied so-called employer-financed child places. Since both subsidised and non-subsidised child-care organisations could supply employer-financed child places, the Stimulative Measures offered the possibility for both subsidised and non-subsidised child-care organisations to claim subsidies (Pelzer 1991). Furthermore, the Stimulative Measures stimulated new child-care organisations to enter the child care market. The Stimulative Measures therefore did not only increase the supply of child care but also had an increasing effect on the competition between child-care organisations.

The decentralisation of the child-care policy to the municipalities on January first 1996, with the accompanying budgetary decrease and falling away of the Stimulative Measures, marked the next step from a welfare sector to a market sector. The child-care subsidies were no longer set specifically for child care but could be spend freely by municipalities. In addition, the municipalities were allowed to choose to work with any child-care organisation they would like; they were not restricted to grant subsidies to subsidised child-care organisations alone. Municipalities therefore started relationships with several child-care organisations and adopted more and more the position of a company who buys child places from a child-care organisation. As a consequence, child-care organisations were confronted with more competition and a pressure to raise efficiency.

The last step in the transition from a welfare sector to a market sector took place with the introduction of a new Act on child care on January first 2005, the 'Wet Kinderopvang'. With the introduction of the new Act on child care the financial organisation of the child-care sector changed from a system of supply-financing to a system of demand-financing. With the introduction of the new Act, the demand is subsidised instead of the supply and therefore the subsidy relationships between child-

care suppliers and municipalities are ended. Moreover, since a demand-driven system implies a direct financial relationship between child-care suppliers and consumers, the selling prices have received much attention in child care and as a consequence, the cost price of child care has come to play a more central role.

The introduction of market forces in the Dutch child-care sector is expected to affect child-care organisations. Instead of being a non-profit company that can fall back on government subsidies, the introduction of market forces necessitates child-care organisations to become independent businesses that are able to gain from the products they are selling. The question is what possibilities child-care suppliers have to deal with the changes in the child-care sector. How can child-care suppliers change the organisation of their work and alter the way they govern their employees in order to adjust to the demands of the market and to improve their financial position?

Child-care organisations try to adjust to the demands of the market by offering services that other organisations do not offer such as longer or flexible opening hours or the provision of other products besides child care (Dekker, Plantenga and Siegers 2001). In doing this child-care organisations expect to improve their financial position. Other strategies that child-care organisations have at their disposal to improve their financial position are, for example, raising the prices of child care or decreasing costs by increasing efficiency (Turksema 2000). Since personnel costs are the most important cost factor in child care, an increase in focus on the cost price forces child-care organisations to use personnel efficiently. Moreover, in order to increase efficiency, child-care organisations need to redefine the way they govern their employees. The introduction of market forces in the Dutch child-care sector is therefore expected to influence the employee governance of child-care organisations, which might in turn affect employee motivation.

3 Effects on employee governance and employee motivation

In this paper we presume that employee governance can be described by four elements: employment contracts, job design, reward system, and career system.⁵ Child-care organisations are expected to change their employment contracts, job design, reward system, and career system in order to increase personnel efficiency.

⁵ The subdivision of employee governance into these four dimensions is taken from Glebbeek and Van der Lippe (2000).

An important efficiency measure is the extent to which the number of child-minders is adjusted to the number of children present in the day-care centre. Since the number of children that is present in the day-care centre is not stable throughout the week, the number of child-minders that is necessary to look after these children needs to be flexible in order to be able to realise high personnel efficiency. By working with flexible employment contracts child-minders can, for example, be scheduled on days that are popular. Also by raising the tightness of the job design efficiency can be increased. Whenever there are less children present than expected, and therefore more child-minders are present on the group than required by law, requiring child-minders to take the day off or to work on different groups or at different locations will, for example, result in a more efficient use of the available employees.

An increase in efficiency thus requires flexibility and effort from the child-minders. In order to motivate child-minders to work hard, child-care organisations might therefore alter their reward and career system by focussing more on pay for performance. In addition, child-care organisations may increase financial rewards and improve the possibilities for development to attract and motivate personnel.

All in all, the introduction of market forces in the Dutch child-care sector, and the accompanying pressure to increase efficiency, is expected to go hand in hand with an increase in: flexibility of employment contracts, tightness of job design, focus on pay for performance, and attractiveness of the reward and career system. It can be expected, however, that changes in employee governance will not leave the child-minders unaffected.

The changes in employee governance can be expected to have both positive and negative effects on the work motivation of the child-minders. An increase in financial rewards and possibilities for development can, for example, be expected to positively influence the work motivation of the child-minders, while an increase in flexibility and effort that is required from the child-minders might influence work motivation negatively.

In order to be able to fully understand the consequences of the introduction of the market forces in the child-care sector on the work motivation of the child-minders it is important to distinguish between extrinsic and intrinsic motivation. Research has shown that people do not only work for the money, but can also be motivated by the work itself (Deci 1975; Frey 1997). In most jobs, both rewards form an important source of motivation. Extrinsic rewards such as financial rewards and status trigger

the extrinsic motivation of the employee, while intrinsic rewards like having a job that is nice and offers you the possibilities to develop yourself trigger intrinsic motivation.

Both forms of motivation are important. For the employer, having employees that are partly extrinsically motivated is important for the guidance of employees. Especially with regard to the unpleasant aspects of a job, the use of financial rewards works very well. In simple, repetitive manufacturing jobs extrinsically motivated employees will therefore work the hardest and the use of financial rewards can be recommended. Intrinsic motivation, on the other hand, is important too. First of all, intrinsically motivated employees have found to have a higher learning capacity than extrinsically motivated employees. Furthermore, laboratory experiments suggest that cognitively difficult tasks are better solved by intrinsically than by extrinsically motivated employees. Finally, intrinsically motivated employees are less costly with regard to disciplining them. They work well regardless of whether the employer is present or not, because the work itself is fulfilling. Especially in jobs that demand a high level of creativity from the employees and where monitoring costs are high, intrinsic motivation is therefore valuable (Frey 1993).

The extent to which it is important to have extrinsically and intrinsically motivated employees thus differs from profession to profession. In order to optimally motivate employees, different jobs therefore need to offer different packages of extrinsic and intrinsic rewards. The care sector is known to be a sector that offers a high level of intrinsic rewards. In care work, the extent to which care work employees are able to care for their clients and have time to pay attention to their clients' emotional needs and their clients or family members' grief, is found to be a very important intrinsic reward of the job (Denton *et al.* 2002). Care-work employees therefore have found to be highly intrinsically motivated (Grunveld 1999), which is important given the difficulties in monitoring. Although in the care sector employers may be able to monitor how many clients are being treated daily, the quality with which they are being treated is less easy to observe. Intrinsic motivation is therefore very important to ensure a high quality in care work.

The degree to which jobs offer extrinsic and intrinsic rewards differs, however, not only from profession to profession. Employees who are working in similar jobs can be confronted with different levels of extrinsic and intrinsic rewards due to differences in employee governance. One organisation might, for example, pay higher wages while another organisation might spend more money on education and

team building. The way in which the organisation is structured and the employees are governed therefore influences the extrinsic and intrinsic rewards that employees may derive from their job. Given that the introduction of market forces in the Dutch child-care sector is expected to influence employee governance, the introduction of market forces in the Dutch child-care sector may therefore also influence the extrinsic and intrinsic rewards and therewith the work motivation of the child-minders.

An increase in flexibility of employment contracts is expected to negatively influence the extrinsic motivation of the child-minders, due to the fact that flexible employment contracts offer less job security and therewith less extrinsic rewards. An increase in flexibility of employment contracts is also expected to have a negative effect on the intrinsic motivation of the child-minders since it requires more flexibility from the child-minders, which might increase work pressure and decrease intrinsic rewards. An increase in tightness of design is not expected to influence the extrinsic motivation of the child-minders, while it is expected to decrease the intrinsic motivation due to an increase in work pressure. An increase in focus on pay for performance is also expected to increase work pressure and therewith to decrease intrinsic motivation. Since an increase in pay for performance might go together with an increase in extrinsic rewards due to an increase in performance feedback and higher financial rewards, an increase in pay for performance is expected to increase extrinsic motivation. An increase in attractiveness of the reward and career system is finally expected to increase both intrinsic and extrinsic motivation by offering higher financial rewards and possibilities for development.

The introduction of market forces in the child-care sector is expected to influence the employee governance of child-care organisations, which in turn is expected to affect employee motivation. The changes in employee governance are expected to have both positive and negative consequences for the extrinsic and intrinsic motivation of the child-minders. Beforehand the outcome of the introduction of market forces in the Dutch child-care sector on the extrinsic and intrinsic motivation of the child-minders is therefore not clear.

4 Method

4.1 Sample

The effects of a longitudinal process, the introduction of market forces in the Dutch child-care sector, are measured using cross-sectional data. The extent to which child-care organisations in the sample are confronted with market forces is assumed to reflect the development of child-care organisations over time.

The data collection took place from March to September 2004. As a first step in the data collection 38 child-care organisations were approached, differentiated with regard to degree of subsidies, size and urbanity. From the 38 organisations 30 organisations are included in the final sample, a response of 79%. The second step involved face-to-face interviews with the managers of the child-care organisations. The managers of the 30 child-care organisations were sent a written questionnaire measuring the employee governance of the child-care organisation. When agreed upon by the manager, the answers given in the questionnaire were discussed with the manager in a face-to-face interview. The final step of the data collection involved the distribution of written questionnaires measuring the work motivation of the child-minders. In total 1046 questionnaires were distributed among child-minders working in one of the day-care centres of the selected child-care organisations. From the 1046 questionnaires 477 have returned, a response of 46%.⁶

The final sample consists of 6 male and 471 female respondents. The average age of the child-minders is 32.3 (sd 9.9). The child-minders are working on average 4.9 years for the present employer (sd 4.5) and on average have a contract for 27 hours a week (sd 7.2). Most of the child-minders have a middle level education (81%), 1% of the child-minders has a lower education and 18% a higher education. Of the child-minders 38% has children living at home, and 68% of the child-minders is living together with a partner.

⁶ The actual response rate might be slightly higher due to the fact that not all questionnaires that have been sent to the day-care centers might have been distributed among the child-minders.

4.2 Measures

Work motivation

Work motivation is measured by two variables: extrinsic motivation and intrinsic motivation. Extrinsic motivation is measured by a 4-item scale taken from Denton *et al.* (2002). On a five-point scale child-minders are asked to what extent they agree with the following statements: my benefits are good, my chances for promotion are good, my job security is good, and I feel that I am fairly paid (disagree completely (1), agree completely (5)). The scale has a Cronbach's alpha of 0.71. Intrinsic motivation is measured by a 2-item scale taken from Denton *et al.* (2002). One of the factors of the original 3-item scale (my job gives me a sense of purpose in life) is deleted from the scale in order to improve the reliability of the scale. The final scale consist of the items 'I get a sense of accomplishment from my job' and 'my job is interesting' and has a Cronbach's alpha of 0.66.

Market forces

The extent to which child-care organisations are confronted with market forces is measured by the amount of subsidies child-care organisations receive (reverse item). The extent to which the organisations are subsidised is measured by a self-constructed scale of five-items with a Cronbach's alpha of 0.76. The scale consists of items such as: whether the child-care organisation is currently part of a broader welfare organisation (no (0) yes (1)) and whether the child-care organisation currently has a subsidy relationship with the government (no (0) yes (1)). The scale is based on the z-scores of the items.

Employee governance

The way child-care organisations govern their employees is measured by four aspects: the flexibility of employment contracts, the tightness of the job design, the attention that is paid to pay-for-performance in the reward and career system, and the attractiveness of the reward and career system. The flexibility of employment contracts is measured by the percentage of child-minders with a temporary contract, the tightness of the job design by the staff-child ratio.⁷ The higher the percentage of

⁷ The staff-child ratio is the ratio between the number of full-time child-minders and the number of children that are present during the opening hours of the day-care centre.

child-minders with a temporary contract, the higher the flexibility of employment contracts and the lower the staff-child ratio the tighter the job design. The attention that is paid to pay for performance in the reward and career system is measured by one item measuring whether organisations offer child-minders a higher wage for working above average (no (0) yes (1)). The attractiveness of the reward and career system is finally measured by a self-constructed scale of six-items with a Cronbach's alpha of 0.70. The scale consists of items such as: the extent to which organisations offer child-minders the possibility to develop themselves through broadening their tasks or following courses (very little (1) very much (5)) and whether the child-care organisations pay child-minders a higher wage than required according to the Collective Labour Agreement (no (0) yes (1)). The scale is based on the z-scores of the items.

Control variables

In the analyses we control for both organisation and child-minder characteristics. The organisation characteristics included are: the size of the child-care organisation measured in terms of number of child places, whether the child-care organisation operates in the Western part of the Netherlands (Randstad), in an urban or in a rural area (urbanity), and the age of the child-care organisation. The child-minder characteristics included are: age, educational level, whether the child-minder has children or not, whether the child-minder has a partner or not, job tenure, and the number of hours the child-minder was working per week.

4.3 Analyses

Regression analysis is used to test whether the extent to which child-care organisations are confronted with market forces influences employee governance. The flexibility of employment contracts, the tightness of the job design, and the attention that is paid to pay-for-performance in the reward and career system is measured with dummy variables. Logistic regression analyses are therefore performed to explain the flexibility of employment contracts, tightness of job design, and focus on pay for performance. Ordinary regression analysis is performed to explain the attractiveness of the reward and career system.

Given the hierarchical data structure (child-minders within child-care organisations) a multilevel approach is used to analyse whether there are differences in employee motivation between child-minders working in child-care organisations

that are confronted with different levels of market forces.⁸ As a first step in the analysis, the empty model is estimated. In the empty model the intercept and the variances on organisation and employee level are estimated. Next, predictors are added to the model. The significance of the predictors is tested by computing the increase in model fit. The increase in model fit is represented by the decrease in deviance and follows a chi-square distribution with the number of added predictors as degrees of freedom (Goldstein 1995). In the analyses, only fixed effects are included.⁹ The effects of the predictor variables are comparable with regression coefficients in ordinary regression (Van Yperen and Snijders 2000). The coefficients reported in the tables are unstandardised regression coefficients. Finally, checks of linearity are conducted. For predictor variables that do not describe a linear relationship with the dependent variables, categorised variables are included in the analyses. Furthermore, in order to obtain as many respondents as possible, missing values are included in the analyses with the use of dummies.¹⁰

5 Results

The child-care organisations in the sample differ with regard to employee governance. Information on the flexibility of employment contracts was available from 23 of the 30 child-care organisations. The child-care organisations report that between 0% and 38% of the child-minders do not have a permanent position. On average 15% of the child-minders are substitute workers. Most child-minders working in child care therefore have a fixed contract. The tightness of the job design, measured by the staff-child ratio, was available from 22 of the 30 child-care organisations. The staff-child ratio in the organisations in the sample ranges from 0.11 to 0.30, with an average of 0.20.¹¹ A staff-child ratio of 0.20 means that there is about 1 full-time child-minder

⁸ Multilevel analysis is a type of regression analysis that takes the hierarchical structure of the data into account. Multilevel analysis is used because ordinary regression analysis may lead to unreliable results when applied to hierarchical data structures (e.g. employees within organisations) since the assumption of independent observations is violated (Snijders and Bosker 1999; Van Yperen and Snijders 2000).

⁹ The effects of predictor variables are fixed by default, that is, the effects of predictors are assumed not to differ between groups. In a multilevel analysis it is also possible to test whether the effects of predictors differs between groups, which is done by including random slopes. Since the inclusion of random slopes did not lead to a significant improvement of the model, random slopes are not included.

¹⁰ The dummy variables for the missing categories in the control variables are not reported in the analyses, but were tested and proven not to be significant.

¹¹ The staff-child ratio is calculated on the basis of the formula of the MO Groep (2002). Differences in the staff-child ratio due to differences in the ages of the children are not taken into consideration. Since child-care organisations in the sample have a comparable composition of groups, the differences in staff-child ratio are not expected to be due to differences in age groups.

per 5 children. Since on average two child-minders are required on a group of twelve children aged between 0 and 4, that is a staff-child ratio of 0.17 is required for groups with children with mixed ages, the child-minders in the sample have on average less children under supervision than is required by the staff-child ratio requirements in the law (Ministerie van SZW 2002). With regard to the focus on pay for performance in the reward and career system reports 30% of the child-care organisations that child-minders are sometimes financially rewarded for displaying an above average work effort. Child-minders are therefore not financially rewarded for displaying an above average work effort in 70% of the child-care organisations. Finally, child-care organisations report differences in the attractiveness of the reward and career system. With regard to the reward system, 14% of the child-care organisations claim to offer a reward that is higher than necessary according to the collective labour agreement, while 41% of the child-care organisations claim to offer a package of secondary conditions of employment that is higher than necessary according to the collective labour agreement. Child-care organisations finally differ with regard to the attractiveness of the career system due to differences in, for example, the possibilities that are offered to child-minders to follow courses. According to the child-care organisations in the sample the possibilities to follow courses differs from very little to very much. On average the child-care organisations claim to offer not little but also not many possibilities to follow courses.

The question is whether the differences in employee governance can be explained by the extent to which child-care organisations are confronted with market forces. The introduction of market forces in the child-care sector was expected to influence the employee governance of child-care organisations. Child-care organisations confronted with a high level of market forces were expected to be characterised by a: higher flexibility of employment contracts, tighter job design, more focus on pay for performance, and a more attractive reward and career system than child-care organisations confronted with a low level of market forces.

As Table 1 reveals, there is not much relation between the employee governance of child-care organisations and the extent to which child-care organisations are confronted with market forces. Given the low sample size (n=30) it is also very difficult to find significant results. The results indicate, however, that the extent to which child-care organisations are confronted with market forces is, as expected, positively related to the tightness of job design and the attractiveness of the

reward and career system of child-care organisations. Table 1 shows that child-care organisations that receive little subsidies display a significantly higher ($p < .10$) tightness of job design and attractiveness of the reward and career system than highly subsidised child-care organisations. Relationships between the extent to which child-care organisations are confronted with market forces and the flexibility of employment contracts and the focus on pay for performance in the reward and career system are not found. In fact, these relations even point in the opposite direction of what was expected.

Table 1: Effects of marketisation on employee governance (unstandardised coefficients)¹²

Variables	<i>Flexibility employment contracts (low=0, high=1)</i> <i>B (s.e.)</i>	<i>Tightness job design (low=0, high=1)</i> <i>B (s.e.)</i>	<i>Pay-for- performance reward & career system (no=0, yes=1)</i> <i>B (s.e.)</i>	<i>Attractiveness reward & career system (very low.very high)</i> <i>B (s.e.)</i>
<i>Control variables</i>				
Urbanity (low.. high)	.207 (.464)	.926 (.562)	.105 (.505)	.346 (.798)
Size organisation (low.. high)	.114 (.490)	.460 (.571)	-.307 (.533)	-1.106 (.851)
Age organisation (low=0, high=1)	.297 (.908)	.623 (1.057)	.456 (.988)	-1.116 (1.580)
<i>Marketisation</i>				
Subsidies org 1 (much) (reference)	.	.	.	.
Subsidies org 2 (average)	-.099 (.966)	.482 (1.113)	-.897 (1.029)	.881 (1.724)
Subsidies org 3 (little)	-.572 (1.003)	2.067+ (1.232)	-1.158 (1.084)	2.975+ (1.722)
N	30	30	30	30

+ $p < .10$.

Employee governance is in turn expected to affect employee motivation. Employee governance is expected to influence the extrinsic and intrinsic rewards that child-minders derive from their job and therewith the extrinsic and intrinsic motivation of the child-minders. The flexibility of employment contracts is expected to be negatively related and the attractiveness of the reward and career system is expected to be positively related to extrinsic and intrinsic motivation. The tightness of the job design is expected to be unrelated to extrinsic motivation and negatively related to

¹² Logistic regression analyses are performed to explain the flexibility of employment contracts, tightness of job design, and focus on pay for performance. Ordinary regression analysis is performed to explain the attractiveness of the reward and career system.

intrinsic motivation, while pay for performance is expected to be positively related to extrinsic and negatively related to intrinsic motivation.

Table 2 displays the relationships between the employee governance of child-care organisations and the work motivation of the child-minders. Columns one and three show that the child-minders in the sample are more intrinsically than extrinsically motivated. The child-minders in the sample display a high intrinsic motivation (intercept 4.42) and a moderate extrinsic motivation (intercept 3.23). The motivation level of the child-minders is equivalent to the motivation level that was found in earlier research among home care workers (Denton *et al.* 2002).

The results further show that there is little variance on organisation level for both types of motivation. The intrinsic motivation of the child-minders even exhibits no variance on organisation level at all and is therefore foremost explained by individual factors. In fact, the intrinsic motivation of the child-minders is not significantly affected by the employee governance of child-care organisations. All employee governance items are negatively related to intrinsic motivation, however, none of the coefficients is significant.

The extrinsic motivation of the child-minders is influenced by the employee governance of the child-care organisation. Child-minders who work in a child-care organisation characterised with a high flexibility of employment contracts report, as expected, a significantly lower ($p < .01$) extrinsic motivation than child-minders who work in a child-care organisation characterised with a low flexibility of employment contracts, while the attractiveness of the reward and career system positively influences ($p < .01$) the extrinsic motivation of the child-minders as expected. The tightness of the job design was not expected to influence the extrinsic motivation of the child-minders and also no significant relationship was found. A high focus on pay for performance in the reward and career system was finally expected to have a positive effect on extrinsic motivation. Again no significant relationship was found, although the relationship points in the opposite direction of what was expected.

Table 2: Effects of employee governance on employee motivation (unstandardised coefficients)¹³

Variables	<i>Extrinsic motivation (very low.very high) Entry B (s.e.)</i>	<i>Extrinsic motivation Final B (s.e.)</i>	<i>Intrinsic motivation (very low.very high) Entry B (s.e.)</i>	<i>Intrinsic motivation Final B (s.e.)</i>
<i>Empty model</i>				
Intercept	3.228 (.059)	3.494 (.167)	4.424 (.027)	4.628 (.134)
Variance organisation	.064* (.027)	.000 (.000)	.000 (.000)	.000 (.000)
Variance employee	.534** (.036)	.503 **(.033)	.352** (.023)	.327** (.021)
<i>Control variables employee level</i>				
Age 1 (< 25) (reference)		.		.
Age 2 (25-39)		-.213* (.092)		-.006 (.074)
Age 3 (>39)		-.120 (.113)		.130 (.091)
Job tenure 1 (>5 = 1)		-.079 (.073)		-.030 (.059)
Education (low = 0, high = 1)		-.255** (.091)		-.133 (.074)
Partner (no = 0, yes =1)		.109 (.080)		-.166** (.064)
Children (no = 0, yes=1)		.209* (.085)		.218** (.069)
Size contract 1 (< 20)		.121 (.122)		-.193* (.098)
Size contract 2 (20-34)		.174 (.091)		-.078 (.073)
Size contract 3 (> 34) (reference)		.		.
<i>Control variables organisation level</i>				
Urbanity (low.. high)		-.097* (.045)		-.015 (.036)
Size organisation (low.. high)		-.018 (.050)		-.024 (.041)
Age organisation (low=0, high=1)		.086 (.080)		.126* (.064)
<i>Employee governance</i>				
<i>Flexibility employment contracts</i>				
Percentage substitute workers (< average = 0,> average = 1)		-.283 **(.085)		-.101 (.069)
Percentage substitute workers (missing = 1)		-.346** (.104)		-.112 (.084)
<i>Tightness job design</i>				
Staff-child ratio (> average = 0,< average = 1)		.097 (.079)		-.037 (.064)
Staff-child ratio (missing = 1)		.140 (.112)		.057 (.090)
<i>Pay for performance reward & career system</i>				
Payment for good performance (no = 0, yes=1)		-.143 (.081)		-.089 (.066)
<i>Attractiveness reward & career system</i>				
Attractiveness (very low .. very high)		.041** (.010)		-.006 (.008)
Deviance	1080.05	1021.45**	852.24	817.34**
R ²	.	.06	.	.07
N	475	475	475	475

** p < .01, * p < .05.

¹³ Multilevel analysis is performed to explain extrinsic and intrinsic motivation. Columns 1 and 3 report the empty model. Columns 2 and 4 report the effects of the control variables and employee governance on employee motivation.

Finally, we tested whether the extent to which child-care organisations are confronted with market forces affects employee motivation. The introduction of market forces in the child-care sector was expected to influence the employee governance of child-care organisations, which in turn was expected to affect employee motivation. Since the changes in employee governance were expected to have both positive and negative consequences for the extrinsic and intrinsic motivation of the child-minders, the outcome of the introduction of market forces in the Dutch child-care sector on the extrinsic and intrinsic motivation of the child-minders was not clear beforehand.

As is shown in Table 3, the extent to which child-care organisations are confronted with market forces is, as expected, positively related to the extrinsic motivation of child-minders. The first column of Table 3 shows that the degree of subsidies that child-care organisations receive is negatively related to the extrinsic motivation of the child-minders. Child-minders working in organisations that are confronted with low market forces thus report a significantly lower ($p < .01$) extrinsic motivation than child-minders working in child-care organisations that are confronted with a high level of market forces. Table 3 further shows that the intrinsic motivation of child-minders is not influenced by the extent to which child-care organisations are confronted with market forces. As displayed in the third column of Table 3, the degree of subsidies that child-care organisations receive is, as expected, positively related to the intrinsic motivation of the child-minders, however, this relationship is not significant.

The effect of marketisation on employee motivation is finally expected to be mediated by employee governance. The second and fourth column of Table 3 show that if governance structure items are added to the analysis, the relationship between market forces and extrinsic motivation indeed weakens.¹⁴ The degree of subsidies that child-care organisations receive is no longer significantly related to the extrinsic motivation of the child-minders. Employee governance therefore mediates the effect of market forces on extrinsic motivation as expected.

¹⁴ We have checked whether the relationship between market forces and extrinsic motivation also disappears when the dummies for the missing values of the flexibility of employment contracts and tightness of job design are left out of the analysis. This is the case, indicating that the relationship between market forces and extrinsic motivation is mediated by employee governance and not by the dummies for the missing values of the flexibility of employment contracts and tightness of job design.

Table 3: Effects of marketisation on employee motivation (unstandardised coefficients)¹⁵

Variables	<i>Extrinsic motivation (very low.very high) Entry B (s.e.)</i>	<i>Extrinsic motivation Final B (s.e.)</i>	<i>Intrinsic motivation (very low.very high) Entry B (s.e.)</i>	<i>Intrinsic motivation Final B (s.e.)</i>
<i>Control variables</i>				
<i>employee level</i>				
Age 1 (< 25) (reference)	.	.	.	.
Age 2 (25-39)	-.199* (.093)	-.213* (.092)	-.008 (.074)	-.006 (.074)
Age 3 (>39)	-.049 (.115)	-.111 (.114)	.123 (.091)	.119 (.091)
Job tenure 1 (>5 = 1)	-.006 (.075)	-.058 (.076)	-.051 (.059)	-.056 (.061)
Education (low = 0, high = 1)	-.234* (.093)	-.249** (.092)	-.137 (.074)	-.140 (.074)
Partner (no = 0, yes =1)	.076 (.082)	.100 (.080)	-.151* (.065)	-.154* (.065)
Children (no = 0, yes=1)	.189* (.087)	.205* (.085)	.218** (.069)	.223** (.069)
Size contract 1 (< 20)	.111 (.125)	.140 (.123)	-.223* (.099)	-.216* (.099)
Size contract 2 (20-34)	.170 (.093)	.185* (.092)	-.100 (.073)	-.091 (.074)
Size contract 3 (> 34) (reference)	.	.	.	.
<i>Control variables</i>				
<i>organisation level</i>				
Urbanity (low.. high)	-.121* (.056)	-.103 (.046)	-.025 (.034)	-.007 (.037)
Size organisation (low.. high)	-.072 (.059)	-.018 (.050)	-.020 (.036)	-.024 (.041)
Age organisation (low=0, high=1)	-.003 (.095)	.090 (.080)	.059 (.056)	.120 (.064)
<i>Marketisation</i>				
Subsidies organisation (very low .. very high)	-.038** (.014)	-.012 (.013)	.011 (.009)	.015 (.011)
<i>Employee governance</i>				
<i>Flexibility employment contracts</i>				
Percentage substitute workers (< average = 0,> average = 1)		-.269** (.087)		-.118 (.070)
Percentage substitute workers (missing = 1)		-.337** (.104)		-.122 (.084)
<i>Tightness job design</i>				
Staff-child ratio (> average = 0,< average = 1)		.077 (.082)		-.012 (.066)
Staff-child ratio (missing = 1)		.121 (.113)		.081 (.091)
<i>Pay for performance</i>				
<i>reward & career system</i>				
Payment for good performance (no = 0, yes=1)		-.145 (.081)		-.087 (.066)
<i>Attractiveness</i>				
<i>reward & career system</i>				
Attractiveness (very low .. very high)		.036** (.012)		.000 (.009)
Deviance	1041.23**	1020.57**	821.19**	815.31
R ²	.05	.06	.06	.07
N	475	475	475	475

** p (2) < .01, * p (2) < .05.

¹⁵ Multilevel analysis is performed to explain extrinsic and intrinsic motivation. Columns 1 and 3 report the effects of the control variables and marketisation on employee motivation. In columns 2 and 4 employee governance is included in the analysis to test whether employee governance mediates the effect of marketisation on employee motivation.

6 Conclusion

This paper described and explained the effects of the introduction of market forces in the Dutch child-care sector on employee governance and employee motivation. The question was raised, whether the possible effects on employee motivation of the introduction of market forces in care work were rightly dismissed. It was argued that given that the performance of the care sector depends highly on the willingness and quality with which care-work employees apply themselves to their tasks it is of utmost importance to have an understanding of the possible effects the introduction of market forces may have on employee motivation.

The introduction of market forces in the Dutch child-care sector was expected to influence the employee governance of child-care organisations, which in turn was expected to affect the work motivation of child-minders. To test whether our expectations were met we made use of a sample consisting of 477 child-minders from 30 Dutch child-care organisations.

First, the expectation that the introduction of market forces in the Dutch child-care sector influences employee governance was tested. Child-care organisations confronted with a high level of market forces were expected to be characterised by a higher flexibility of employment contracts, tighter job design, more focus on pay for performance, and a more attractive reward and career system. The results show that child-care organisations confronted with a high level of market forces are, as expected, characterised by a tighter job design and offer a more attractive reward and career system than child-care organisations confronted with a low level of market forces. Relationships between the level of market forces the child-care organisation is confronted with and the flexibility of employment contracts and focus on pay for performance were not found.

Second, we have tested to what extent employee governance affects employee motivation. The flexibility of employment contracts was expected to be negatively related and the attractiveness of the reward and career system was expected to be positively related to extrinsic and intrinsic motivation. The tightness of the job design was expected to be unrelated to extrinsic motivation and negatively related to intrinsic motivation, while pay for performance was expected to be positively related to extrinsic and negatively related to intrinsic motivation. The results show that employee governance does not affect intrinsic motivation. Employee governance is, however, related to extrinsic motivation. As expected, the flexibility of employment

contracts is negatively related and the attractiveness of the reward and career system is positively related to extrinsic motivation.

Finally, we have tested whether the extent to which child-care organisations are confronted with market forces affects employee motivation and whether this effect is mediated by employee governance. Since the changes in employee governance were expected to have both positive and negative consequences for the extrinsic and intrinsic motivation of the child-minders, the outcome of the introduction of market forces in the Dutch child-care sector on the extrinsic and intrinsic motivation of the child-minders was beforehand not clear. The results show that child-minders working in child-care organisations confronted with a high level of market forces report a higher extrinsic motivation than child-minders working in child-care organisations confronted with a low level of market forces. This effect is mediated by employee governance. The extent to which child-care organisations are confronted with market forces does not affect the intrinsic motivation of the child-minders.

All in all, the results presented in this paper show that the introduction of market forces in the Dutch child-care sector influences employee governance, which in turn affects employee motivation. This study has, however, two important limitations. First, the effects of a longitudinal process, the introduction of market forces in the Dutch child-care sector, are measured using cross-sectional data. The extent to which child-care organisations in the sample are confronted with market forces is assumed to reflect the development of child-care organisations over time. Given the small differences in employee governance between the child-care organisations in the sample one may question whether the child-care organisations in the sample indeed reflect the development of child-care organisations over time. The differences between child-care organisations might have declined so much over time that at the time of the data collection the differences between child-care organisations were too small to find significant results. By incorporating measurements of changes over time into the analysis, a better understanding of the effects that the introduction of market forces in the child-care sector has on employee governance and employee work motivation is expected to be received.

Second, the relationship between employee governance and employee motivation might be more complicated than presumed in this paper. In this paper a direct relationship between rewards and motivation is presumed. If a change in employee governance increases extrinsic rewards, extrinsic motivation is also

expected to increase. Similarly, an increase in intrinsic rewards is expected to increase in intrinsic motivation. From previous research we know, however, that a change in extrinsic rewards not only influences extrinsic motivation, but may also influence intrinsic motivation by way in which the change in extrinsic rewards is perceived. The phenomenon that extrinsic rewards may negatively influence intrinsic motivation was first brought forward in psychology (Deci 1975) and is known as ‘the hidden cost of reward’ or ‘the corruption effect of extrinsic motivation’ (Frey and Osterloh 2002, p. 13). Bruno Frey has introduced the phenomenon in economics under the term ‘crowding-out’ effect (Frey 1997). By incorporating extrinsic and intrinsic rewards in the analysis it will be possible to disentangle to what extent employee governance affects the extrinsic and intrinsic rewards that employees derive from their job and to what extent these rewards affect extrinsic and intrinsic motivation. In doing this a better understanding of the effects of employee governance on employee motivation is expected to be received.

Despite the limitations, what is clear from this study is that the introduction of market forces in the Dutch child-care sector influences the work motivation of the child-minders. All in all, the results indicate that the positive effects of the introduction of market forces in the Dutch child-care sector seem to outweigh the negative effects. The question is whether the results are specific for the Dutch child-care sector or whether these effects can be expected in other care sectors too. Further research is needed to receive a better understanding of the conditions under which changes in care work positively or negative influence the extrinsic and intrinsic motivation of care-work employees. The introduction of market forces in the Dutch child-care sector, however, shows that it is possible to change the balance between public and private roles in the care sector in such a way that it cherishes high employee motivation.

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